IN THE CLAIMS

Amend Claims 1, 7, 13, 15, and 16

Cancel Claims 9 and 17

1.   (Currently Amended) A method for automatic handling of errors within a database engine, the method comprising the steps of:

detecting an error while executing a query access plan; ~~and~~

in response to detecting the error, automatically rebuilding the query access plan to generate a new query access plan~~.~~; and

executing the new query access plan.

2.   (Cancel) The method of claim 1, further comprising the step of:

executing the new query access plan.

3.   (Original) The method of claim 1, wherein the error is a function check.

4.   (Original) The method of claim 1 further comprising the steps of:

receiving another error while executing a function within the new query access plan;

identifying a first implementation method of the function within the new query access plan; and

rebuilding the new query access plan by replacing the first implementation method with a second implementation method of the function so as to generate a rebuilt query access plan.

5.   (Original) The method according to claim 1, further comprising the step of:

logging information about the error, and the new query access plan.

6.   (Original) The method according to claim 1, further comprising the step of:

reporting the error.

7.   (Currently Amended) A method for automatic handling of errors within a database engine, the method comprising the steps of:

receiving an error while executing a function within a query access plan;

identifying a first implementation method of the function within the query access plan; ~~and~~

rebuilding the query access plan by replacing the first implementation method with a second implementation method of the function so as to generate a new query access plan; and

executing the new query access plan.

8.   (Original) The method of claim 7, wherein the function is one of a join function, an indexing function, a grouping function, and an ordering function.

9.   (Cancel)

10.   (Original) The method of claim 9, further comprising the steps of:

receiving another error while executing the function within the new query access plan; and

rebuilding the new query access plan by replacing the second implementation method with a third implementation method of the function.

11.   (Original) The method according to claim 10 further comprising the step of:

logging information about the error, the another error, and the new query access plan.

12.   (Original) A method for automatic handling of errors within a database engine, the method comprising the steps of:

executing a query access plan comprising a plurality of functions, each function including a first implementation method;

detecting a first error when executing a first function;

rebuilding the query access plan to generate a new query access plan;

executing the new query access plan;

receiving a second error while executing the first function within the new query access plan; and

rebuilding the new query access plan by replacing the first implementation method with a second implementation method of the function.

13.   (Currently Amended) A program product, comprising:

a program code configured upon execution to:

detect an error while executing a query access plan, ~~and~~

~~in response to detecting the error,~~ automatically rebuild the query access plan to generate a new query access plan <u>in response to detecting the error</u>

<u>execute the new query access plan</u>; and

a signal bearing medium bearing the program code.

14.   (Original) The program product of claim 13, wherein the program code is further configured to:

receive an error while executing a function within the new query access plan;

identify a first implementation method of the function within the new query access plan; and

rebuild the new query access plan by replacing the first implementation method with a second implementation method of the function so as to generate a rebuilt query access plan.

15.   (Currently Amended) A program product, comprising:

program code configured upon execution thereof to:

receive an error while executing a function within a query access plan;

identify a first implementation method of the function within the query access

plan, ~~and~~

rebuild the query access plan by replacing the first implementation method with a

second implementation method of the function so as to generate a new query

access plan, <u>and</u>

<u>execute the new query access plan</u>; and

a signal bearing medium bearing the program code.

16. ·   (Currently Amended) An apparatus comprising:

at least one processor;

a memory coupled with the at least one processor; and

a program code residing in memory and executed by the at least one processor, the

program code configured to:

detect an error while executing a query access plan; ~~and~~

~~in response to detecting the error,~~ automatically rebuild the query access plan, in

response to detecting the error, to generate a new query access plan, <u>and</u>

<u>execute the new query access plan</u>.

17.   (Cancel)

18.   (Original) The apparatus of claim 16, wherein the error is a function check.

19.   (Original) The method of claim 16, wherein the program code is further configured to:

detect another error while executing a function within the new query access plan;

identify a first implementation method of the function within the new query access plan;

and

rebuild the new query access plan by replacing the first implementation method with a second implementation method of the function so as to generate a rebuilt query access plan.

20.   (Original) The method according to claim 16, wherein the program code is further configured to:

    log information about the error, and the new query access plan.
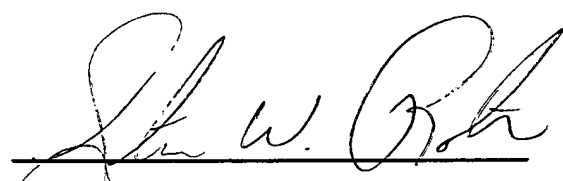
21.   (Original) The method according to claim 16, wherein the program code is further configured to:

    report the error.

Date: <u>March 25, 2005</u>   Respectfully submitted,

                            By: _____

                                Steven W. Roth, Consulting Attorney
                                Registration No.: 34,712

Telephone: (507) 253-1600   IBM Corporation - Department 917
Fax No.:   (507) 253-2382   3605 Highway 52 North
                                      Rochester, Minnesota 55901-7829